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AUTHOR Kolstoe, Oliver P.
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ABSTRACT

Professionals in the educational field have recognized the special problems of the mentally retarded and since the early part of the 1950s have attempted to find out just how to intervene between the limitations of the retarded and the demands in the world of competitive work. Since some retarded individuals become competent employees while others do not, studies have examined differences between these persons. Studies have also examined problems which have caused retarded individuals trouble on their jobs--poor personal and social skills, poor work habits, and fault of employers, coordinators, or parents. Professionals have attempted to take into account these conditions. For example, attempts are being made to broaden the range of training opportunities through cooperative efforts with other disciplines--notably vocational rehabilitation and vocational education. This occurred in the 1960s at about the same time change began to make itself felt in many social institutions influenced by humanism, resulting in the concept called mainstreaming--the integration of handicapped into regular classrooms. But is integration the best policy? Studies show that there appears to be a real danger that handicapped students will become lost in regular classes, or they will not receive the special support they need from instructors and students of regular classes. Research suggests what educators should be doing with the mildly retarded: (1) Label the students, but not refer to them as "mildly retarded"; (2) give them a highly structured program which recognizes their delayed readiness and their slower than average academic progress; (3) present material in a competency-based, individualized format, and (4) plan enrichment experiences. (SH)

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Occasional Paper No. 33

IMPLICATIONS OF RESEARCH FINDINGS ON VOCATIONAL AND CAREER EDUCATION FOR THE MENTALLY HANDICAPPED

by

Dr. Oliver P. Kolstoe
Professor of Special Education and Chairperson
Department of Mental Retardation
University of Northern Colorado

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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PREFACE

The Center for Vocational Education and The Ohio State University welcomed a presentation by Oliver P. Kolstoe, Professor of Special Education and Chairperson, Department of Mental Retardation, University of Northern Colorado, entitled "Implications of Research Findings on Vocational and Career Education for the Mentally Handicapped."

Dr. Kolstoe depicts the plight of handicapped workers as they face decreasing routine jobs and the implications for R&D in dealing with the training of handicapped workers. He goes on to describe how R&D efforts will have to deal with work roles as they become more abstract and therefore more baffling to handicapped workers.

Born in Canton, South Dakota, Dr. Kolstoe received a B.A. from State College, Valley City, North Dakota, an M.S. from the University of North Dakota, and a Ph.D. from Iowa State University.

Dr. Kolstoe's professional experience includes serving as a high school teacher, public school administrator, university professor, and department chairperson. He served in the Army Air Corps from 1941-1945, where he received the Distinguished Flying Cross. He is a member of various local and national committees and organizations.

It is with a great deal of pleasure that The Ohio State University and The Center for Vocational Education welcome Oliver P. Kolstoe, to share his presentation "Implications of Research Findings on Vocational and Career Education for the Mentally Handicapped."

Robert E. Taylor
Executive Director
The Center for Vocational Education

IMPLICATIONS OF RESEARCH FINDINGS ON VOCATIONAL AND CAREER EDUCATION FOR THE MENTALLY HANDICAPPED

Change has come to be considered about the only constant in our harried lives. Even though we recognize that it has a tremendous impact on our living styles, we often forget just how dramatic it is. Knowledge about the handicapped, for example, has increased more in the past ten years than in the 100 years preceding that, and knowledge increased more in those 100 years than in the entire 4,000 years of recorded history before that. There was a time when a professional in the field was considered ignorant if he/she were not familiar with every single published study in his/her area; such is no longer the case. Now we are becoming increasingly dependent upon information synthesized and often interpreted for us by others. Because of the sheer volume of research, we are forced more and more to deal with the abstract concepts of what the research means than with the concrete details of the data themselves. For those of limited ability to deal with abstractions it can be baffling, humiliating, or defeating. But for all people, it is a fact which must somehow be lived with because the knowledge explosion has affected all areas, not just special education.

Another dramatic change involves the area of automation. During the great economic depression of the 1930s, technology was branded as a villain of gigantic proportions. Because each new labor-saving machine invented was believed to be responsible for putting even more people out of work, the end of the depression seemed to become so remote as to defy detection. In the 1930s, machines were considered a haunting specter which cast a sinister shadow. Today that specter is no less real as automation takes even more of the routine jobs out of industry. One consequence of this development is that a single farm worker today can produce what ten workers produced in the 1930s. Not only do we have an apparent surplus of food, but we also have an apparent surplus of workers. Furthermore, as automation becomes even more accepted, every worker who makes a living at a job which does not require him/her to be creative is believed by Carrigan (1969) to be in imminent danger of having his/her job taken over by a machine. Possible unemployment for the handicapped remains a haunting specter.

A third consequence of our rapid technological advance is that the function of the work force is changing drastically. According to Carrigan, Silherman (1961) estimates that 60 million jobs will change in character in the next generation. What this means for people is that children who are just starting first grade can expect their vocations to change at least three times in their lifetimes. Margaret Mead (1959) believes our educational program must prepare a man/woman for working at jobs which do not presently exist and cannot even be predicted with any degree of accuracy.

If these visions of the future are substantially correct, it would appear that the individuals of limited ability would be the most vulnerable of all the members of the human family since they have demonstrated that they have great difficulty in understanding and dealing with abstractions, and that they are lacking in the capacity for flexible reactions: in short, to respond positively to these projected changes.

Professionals in the field have recognized the special problems of the retarded in particular and since the early part of the 1950s have attempted to find out just how to intervene between the limitations of the retarded and the demands for judgment, understanding, and flexibility in the world of competitive work.

One of the most believable of the studies was done by Ruby Jo Reeves Kennedy. In the 1940s she studied two groups of people from the same cultural and socioeconomic background. One group was mildly retarded with IQs below 75, and the other group was not retarded. The remarkable thing about her study was that she had about 150 in each group who could be studied in the 1940s and also twenty years later in the 1960s, so the effect of both maturity and technological change could be determined. The retarded emerged as "hewers of wood and drawers of water." That is, they worked at somewhat simpler jobs than the nonretarded. But about the same percent was employed, and in the twenty intervening years about the same percent got promotions and more responsible jobs. The surprising finding was the large number who were employed were on skilled and semiskilled jobs. Furthermore, the retarded showed a better record of job stability than the nonretarded. In all, the picture was one of individuals who were responsible, quiet, dependable citizens who lived rather simply, but served society well. This same picture emerges from the follow-up study of William Findley (1968) who found that the retarded managed their lives and money much as everyone else did. Some were frugal and effective budgeters while others endured a hamburger diet for only so long before indulging in a steak, lobster, rock cornish hen orgy. Some were recipients of welfare help, but apparently no more than would be expected among similar, nonretarded populations; but others had very responsible jobs.

Since some retarded individuals become competent employees while others do not, efforts have been made to identify differences between these persons. They have looked at the individuals, the job settings and the jobs themselves. Probably the most comprehensive study of individuals was done by a number of us who were involved in the Employment Training Project in Southern Illinois in the early 1960s. We were fortunate in having access to studies which compared selected characteristics of successful and unsuccessful retarded so we were able to supply pieces which were missing in previous studies, and we had reasonably sized groups of successful and unsuccessful men who had been given the same kind of work training and guidance. Any differences therefore had to be in the characteristics studied, not in the training of the young men.

In the academic areas we found no differences in the IQs of the successful and unsuccessful group. This was later partly confirmed by Findley, but he did find a definite superiority of the youngsters with IQs above 60 in the kinds of jobs they held, in the amount of money they earned, and in the ease with which they were trained, compared with those with IQs below 60. In academic skills, in those youngsters above a reading grade level of 2.5 there was no difference, but below that, the youngsters were very hard to place.

In the personal sphere, there were no differences in physical characteristics, except that some youngsters who were easier to place looked better than the others; and the youngsters who were successful showed somewhat better overall dexterity and coordination.

Socially the successful youngsters were superior in self-confidence, cooperation, cheerfulness and getting along with fellow employees and supervisors. Vocationally they showed greater concentration and more initiative.

Essentially, a low IQ and lack of reading skills do not prevent employment, but they limit employment. Brighter youngsters who read fairly well were easier to place and got better jobs. They were also apt to be somewhat better looking and have better personalities and work skills. It should be noted that these are all general characteristics which are as applicable to one kind of job as they are to another.

Studies have also been made of those problems which have caused retarded individuals trouble on their jobs. Charles Kokaska (1971) surveyed the difficulties of 1,251 retarded individuals.

First of all, it should be noted that less than one-fourth of the people had any significant problem. However, of the problems identified, 33 percent were due to poor personal and social skills and 23 percent were due to poor work habits, but 44 percent were deemed to be the fault of employers, coordinators, or parents.

An analysis of some 1,240 jobs done by a number of us working in Wyoming in 1968 indicated that the requirements for the successful performance of the jobs were nearly all physical. Very few, if any, academic skills were involved and those that were, were quite specific. For example, one job in a produce department of a grocery store required the youngster to mark prices on the bags of fruit and vegetables. He had to find the price per pound line on the scale dial and follow that row to the column where the indicator of the scale identified the price. This was then written on the sack. This is not an arithmetic skill. It is a specific skill of being able to read the numbers on a weight scale. In job requirements the physical aspects of the jobs analyzed (food service, janitorial, laborer, assembly, stock clerk, hospital, etc.) were largely generalizable to other jobs because they were those of speed, strength, coordination, pacing, and endurance. The academic skills were specific rather than general.

Professionals have attempted to take into account these aforementioned conditions in some rather commendable ways. First, they have attempted to guide retarded youngsters into jobs in businesses which have not yet been and are not likely to be hit by automation. This means that many youngsters are placed in service jobs. Indeed Kokaska found 60 percent placed in service occupations compared with 1 percent in clerical and only 7 percent in either crafts or assembly. Second, training programs have concentrated on developing skills which generalize to many areas rather than to train the youngsters only for entry-level skills in specific jobs, with the belief that these skills will enable the youngsters to work in many jobs, not just one or two. Third, attempts are being made to broaden the range of training opportunities through cooperative efforts with other disciplines—notably vocational rehabilitation and vocational education. This occurred in the 1960s, but the very success of the efforts had some serious consequences. Because no real services existed for youngsters whose IQs were between 70 and about 85 or 90, upper IQ limits for defining mental retardation were gradually raised to include these youngsters, and they were placed in special education classes.

Lloyd Dunn called attention to problems in our special education programs in the late 1960s:

> A better education than special class placement is needed for socio-culturally deprived children with mild learning problems who have been labeled mentally retarded. Over the years, the status of these pupils who come from poverty, broken and inadequate homes, and low status ethnic groups has been a checkered one. In the early days these children were simply excluded from school. Then, as Hollingsworth (1923) has pointed out, with the advent of compulsory attendance laws, the schools and these children "were forced into a reluctant mutual recognition of each other." This resulted in the establishment of self-contained special schools and classes as a method of transferring these "misfits" out of regular grades.

At about the same time as Dunn published his article, change began to make itself felt in many social institutions influenced by humanism, and segregated programs for the mildly retarded became one focus of discontent. There were five main criticisms of segregated classes:

1. Efficacy studies reported that children in special classes did not learn any more academically than similar children in regular classes. The programs were therefore seen as ineffective.

2. Twice as many blacks and three times more Chicanos than their proportions in the general population were found in special education. Thus the schools were seen as a tool for the segregation of minority children.

3. Parents were seldom consulted about programs. Special education was accused of being authoritarian and arbitrary.

4. Mental retardation was identified by tests which were highly suspect when applied to minorities. Many children were believed to be misclassified.

5. The youngsters identified were then given labels which contributed to a self-fulfilling prophecy of low expectation and consequent low achievement. Labeling was thought to contribute to a self-fulfilling prophecy of low achievement and training for dead-end jobs.

In the September 1972 issue of *Exceptional Children* I responded to those criticisms. Suffice it to say that my examination of the data upon which those criticisms rest indicated that we have actually done a much better job of helping handicapped children in some ways than we have gotten credit for. For example, the employment rate from work study programs is 50 percent higher than that of regular programs and the job levels are higher, and the self-fulfilling prophecy charge is largely a myth. Nonetheless, some rather dramatic changes occurred in programming for the mildly retarded, all revolving around the general concept called mainstreaming.

It should be noted that the children referred to by Dunn and who are largely involved in mainstreaming are those youngsters whose IQs fall between 70 and 85.

According to CEC, mainstreaming is a belief which involves an educational placement procedure and process . . . based on the conviction that each exceptional child should be educated in the least restrictive environment in which his/her educational and related needs can be satisfactorily provided.

The concept suggests that the best educational placement for a handicapped child is in the regular classroom, with support services provided by a consultant or itinerant teacher. Next best is a resource room, and next, a partially integrated special class. The least desirable is a segregated special classroom in the public school.

From what I can determine, the concept of the least restrictive alternative was first applied to the handicapped in the 1971 court case of the Pennsylvania Association for Retarded Citizens (PARC) vs. the State Department of Education. However, the concept has been around in criminal law ever since the Magna Carta. Making the punishment fit the crime is a standard principle in law which translates to sentencing criminals to the least confining penal institutional setting possible.

It is not surprising to me that special education assignments and prison sentences should both be considered rehabilitation programs. What does surprise me is the implication that the less we help handicapped youngsters the better the program, and that if we offer more than an absolute minimum of help, we do them a disservice.

It seems appropriate at this point to look at the evidence we have on what happens to mentally retarded children in the regular classroom who get a minimum of special help or none at all. Here the classic studies of Johnson and Kirk in 1950 are our most venerable sources of information. Using a sociometric technique, these investigators found (25 classrooms, 689s):

1. Three times more stars among typical than MR children.

2. Sixty-nine percent isolates among MRs vs. 39 percent typical children.

3. Over ten times more rejectees among MRs vs. typical.

Johnson and Kirk point out that the retarded child in a regular class is as socially isolated as he/she would be if he/she were not physically present. Tom Jordan (1966) further contends that special class placement does not precipitate a cleavage between the retardate and his/her peers, but rather that the cleavage already exists whether the retardate is in the special class or not.

In 1969, H. Hayball and H. Dilling reported to the Scarborough, New York Board of Education that the mentally retarded youngsters who had been returned to regular classes were achieving below grade level in their academic subjects. Such a report by itself could be quite suspect, except that exactly the same finding has been reported in a doctoral dissertation done by A. L. Britton at USC in California in 1972.

Jay Gottlieb and J. Baker (1975) analyzed some of the data from the PRIME project. The social acceptance of 291 educable mentally retarded children was analyzed in relation to the amount of time they spent in the regular grades. Approximately 7,000 nonhandicapped children in the third, fourth, and fifth grades furnished the sociometric data. The investigators found that when the children spent 25 percent or less time in the regular grades they were more socially accepted by their peers than when they spent 75 percent or more of their time in the regular grades. The authors interpret these results as indicating that when a retarded child attends the regular grades for a small part of the day, he/she does not interfere with other children, but when he/she spends 75 percent of the time in the regular grades, he/she is more noticeable and more interfering. In a further analysis, Gottlieb and Baker studied the time integrated into academic activities and the child's self-report of social-emotional factors. They found that (1) with Anglo children the more time integrated they were, the more socially ineffective they felt; (2) on the other hand, with the black and Mexican-American children, the opposite results were obtained: the more time they spent in the regular grades in academic work, the more enthusiastic they were about school; but (3) the more time they spent in regular grades, the more poorly they perceive their own academic abilities.

The effects of the mainstreaming programs have been felt in other ways, also.

J. R. Shotel, Richard Iano, and J. F. McGettigan (1972) studied the attitudes of elementary teachers associated with an integrated resource room program toward handicapped children. They found that at the beginning of the study the elementary teachers expressed optimism concerning the retarded child's adjustment, but at the end of the study, the elementary teachers reported that the retarded children were not achieving academically and were not accepted by the other children. Furthermore, many regular classroom teachers felt they are being called upon to work with children they do not understand nor feel comfortable with, and this has the effect of diminishing the effectiveness of the program being offered to the youngsters. These are findings related to elementary level programs.

At the high school level the Olympus Research Corporation studied ninety-two vocational education programs and reported:

> Despite a policy to integration, "Of the students enrolled in the program, 70 percent were in special classes . . . there were several reasons for lack of mainstreaming implementation: (1) reluctance of instructors to accept the handicapped students;

(2) inability of instructors to teach the handicapped; (3) lack of individualized instruction techniques in most projects; and (4) referral (into the program) of individuals who could not succeed in advanced skills training classes."

They went on to ask:

Is integration the best policy? There appears to be a real danger that handicapped students will become lost in regular classes, or that they will not receive the special support they need from instructors and students of regular classes.

Additionally, they found many schools mixed the handicapped and disadvantaged either because of size or because of funding. They observed:

Since the educational needs of the disadvantaged and handicapped are usually different, and since the disadvantaged, understandably, were often humiliated by being placed in classes with the mentally retarded, the mixing of the mentally handicapped with the disadvantaged is indeed a questionable practice.

I am afraid that in our zeal to assure that the past criticisms of programs will no longer apply, we have initiated some widespread policies that have questionable consequences.

First, under the leadership of Herbert Grossman, an A.A.M.D. committee suggested that the upper range of IQ used to identify mental retardation be reduced to 70, rather than to include youngsters whose IQs are in the 80s or 90s.

Second, many states require that the percent of minority youngsters who can be served be no more than their proportional representation in the general population.

Third, in order to avoid labeling youngsters "mentally retarded," many children are being reclassified and are now being called "educationally handicapped" or "learning disabled" and being placed with L.D. and E.H. children.

Fourth, some state legislatures have passed certification laws which are related to the degree of the handicapped: mild, moderate, or severe and profound with the implication that the educational problems of youngsters with emotional disturbance, learning disabilities, and mental retardation of a mild level, will all succumb to the same educational techniques.

Fifth, special classes are rapidly being replaced by resource rooms.

The practical consequence of these practices is that, first, a very large number of youngsters whom we used to call "mildly mentally retarded" is no longer being served. This is either because they have IQs higher than 70 or because they come from minority backgrounds, and too high a percentage of minority youngsters is already in the programs.

Second, the emphasis of programs has shifted from concern for the development of vocational competencies and skills of daily living to an academic orientation. The educational objectives are those related to school adjustment at the expense of a life adjustment program. We seem to be assuming that programs in regular class can now accommodate a range of individual differences they could not handle ten years ago. The evidence does not support the assumption.

As much as we might wish it, there is no way we can eliminate the problems of the youngsters we used to call "mildly retarded" by lowering the IQ and defining them out of existence. Their

lack of skill at self-instruction, ability to generalize, and difficulty with academics persist regardless of what labels they may have. The youngsters are still with us and we are not doing much to help them.

Right now it seems to me we are about at the same point we were some twenty years ago. We provide a pretty good set of experiences for moderately retarded youngsters but ignore the inappropriateness of either mainstreaming or special class programs for the mildly retarded. The evidence suggests that neither program is satisfactory in meeting their needs.

Let me describe what I think the research suggests we should be doing with the mildly retarded.

First, I think that we should label the youngsters, but we probably should not refer to them as "mildly retarded." True, they are not very good at academic tasks, and they generally do not score well on IQ tests, but they do not have the limitations in thinking and social incompetence associated with mental retardation. I don't know what they should be called, but they must be identified and that means they must be labeled something; otherwise they will continue to be ignored. Samuel Kirk called them "slow learners" but nobody liked that very well. Lloyd Dunn has used the term "General Learning Disabilities (GLD)" but that has not caught on either. Some have called them "Minimally Impaired." Perhaps the term, "children with special needs," is sufficiently innocuous to be acceptable. In any case, they must have some label or they get no help.

Second, the youngsters should be given a highly structured program perhaps like DISTAR, but one which recognizes their delayed readiness and their slower than average academic progress. Academic expectations must be geared to their development, not vice versa.

Third, the academics should be presented in some kind of individualized format, and they should be competency-based. No youngster should be socially promoted from one level of program to the next. All that does is delay or postpone the recognition of failure. If failure to learn is occurring, it must be discovered and dealt with as quickly as possible, not by sending the student on to the next teacher.

Fourth, enrichment experiences should be deliberately planned for. Music, art, literature, dance, and theater are important cultural elements, but so also are politics, government, law, and social agencies, because the students will have many contacts with all of these. Unfortunately, many of these children come from families that know only the experiences in which the family is "acted on" by the agencies but never where they have any influence on determining the actions of the institutions themselves. They need to find out how to manage these agency representatives rather than to be just passive receivers of the good intentions and welfare efforts of others.

At the high school level, I think we need to depart rather drastically from what currently exists. The traditional work-study programs have concentrated on teaching generalizable work skills and habits which are applicable to a wide range of jobs. This is not appropriate because they are generally low level and not specific enough. On the other hand, the traditional academic fare is not relevant for noncollege bound youngsters. I think our modern community college is a better model than our typical high school. Community colleges are very practically oriented in both their academic classes and their vocational offerings, and this is often lacking in high schools. These youngsters need a wider choice of options in a more adult oriented setting, and they need to be able to return for retraining at any time.

They need to be freed from the requirements of math, science, history and literature as prescribed by the Carnegie Units required for graduation from high schools and need to be allowed

to work for competence certificates in carpentry, electronics, metal work, business operations, food preparation and processing, and the like. It should be a skill training program leading to a high order of skill with apprenticeship entry to craft unions built into the options.

Lest you think we are dealing with a rather insignificant problem, reflect for a moment that according to Public Law 94-142, only 12 percent of the total population of school age children qualifies for special education services. This includes all of the different kinds of handicapped children. Statistically, the group of youngsters whose IQ scores range from 70 to 85 make up 14 percent of the population. This is a larger group of youngsters than all of the handicapped put together, and under present regulations of P.L. 94-142 they are not even recognized as having any special problems.

One further point needs to be made. When Lyndon Johnson launched his great society movement in the latter part of the 1960s, federal support for research for the handicapped reached an all time high of about 18 million. The tragic involvement in the Vietnamese war not only destroyed Johnson's political career, but it also effectively started an end to federal support for basic and long-term research on the handicapped. When McNamara introduced the Program Planning and Budgeting System (PPBS) into Pentagon operations, he revolutionized administration techniques in government. Without going into detail, suffice it to say that the system makes it possible for people who know virtually nothing about an area to make policy decisions, because they are based on cost-effectiveness relationships.

The failure of PPBS to bring an end to Vietnamese conflict is believed by Robert Halberstrom and others to be due to the impossibility of putting a numerical value on human morale as a factor in war. Despite this, federal funding in education has been tied to learning performance of children without any recognition of the part played by a child's need for learning as a factor in education and our inability to quantify that need. That is, there is no way one person can teach anything to another. Children learn. But learning is something done by an individual. No PPBS chart is going to guarantee that a child will learn, because his/her willingness to try is the critical variable which determines learning.

In 1968 when Nixon became President of the United States, he started placing as department heads people who were administrators rather than professionals in the field. Elliott Richardson, for example, is a lawyer, not an expert in Health, Education or Welfare. By 1972 Nixon's influence on insisting that practical results be demonstrated as outcomes from federal expenditures had permeated the Office of Education and PPBS charts began to show up in research proposals. These have made it possible to audit every step of the operation and also have focused attention on immediate and practical rather than long-term or conceptual results. By 1973 the *Federal Register* strongly implied that unless the research proposals gave promise of immediate results which were no more than one step away from classroom application, they would not be funded. Furthermore, there was an unmistakeable implication that studies which gave no promise of results within one year, would not be funded. Long-term commitments of support have nearly disappeared.

The net result of this situation has meant that educational practices have been determined by court cases and based on principles and philosophy rather than hard fact.

Every few years we have a new miracle drug or treatment which promises new hope for the retarded. Several years ago glutamic acid was believed to be the answer to all our problems. When that fizzled out it was replaced by various other things such as macrovitamin doses of C, D, and E. Motor patterning to correct the evolutionary developmental gaps of homolateral and cross lateral coordination or lack of cerebral dominance is still practiced by some people, but it has largely been abandoned as we turn to various applications of operant conditioning for salvation. Recently

D.M.S.O. is emerging as a developmental stimulant, at least as promising as glutamic acid was thought to be in the 1950s. Also, practices of normalization and mainstreaming have joined macrovitamin applications, motor patterning, operant conditioning and D.M.S.O. What is of concern is that each of these prescriptions has been adopted as a dominant factor in children's lives with no empirical data to support them. Whenever someone suggests that their effects ought to be empirically tested by accepted research techniques not only is there great resistance to the evaluation efforts, but there is tacit acceptance of governmental policy for practical results which makes federal support of the necessary research virtually impossible.

I believe that the most critical problem facing professionals working with the handicapped is to find some way to convince our governmental officials of the danger of seeking simple answers to complex problems. Without a reversal of current governmental policy relating to research support, we may be in danger of continuing to be the victims of every fad and fancy that comes along. That seems a terrible price to pay for insisting on practical results from research support.

From this brief overview, it seems that we can draw some fairly firm conclusions:

1. The kinds of behaviors which need to be taught to assure adequate skills of living and working have been identified through research, and research has demonstrated they can be taught in our programs.

2. Current evaluations of mainstreaming attempts either at the elementary or secondary levels have not generated data that would indicate the attempts are even as successful as former program efforts.

3. Because of our unwillingness to label them, a group of youngsters larger than the total of all the handicapped is currently not being served very effectively.

4. Changes in programs have been proliferating nationwide without any firm research evidence to support them.

5. Federal policy for research support in education is counterproductive to scholarly investigations.

If our society is going to continue to be characterized by rapid change, it seems more important than ever that we examine that change empirically so we become the masters of it, not its victims. This is particularly crucial for persons who have a handicap that makes it difficult for them to adjust to these changes.

REFERENCES

Dunn, Lloyd M. "Special Education for the Mildly Retarded—Is Much of It Justified?" *Exceptional Children,* September 1963, pp. 5-22.

Dunn, Lloyd, ed. *Exceptional Children in the Schools,* 2nd ed. New York: Holt Rinehart and Winston, 1973.

Gottlieb, J. and Baker, J. L. "Socio-Emotional Characteristics of Mainstreamed Children," *Report at C.E.C. April 1975.* "The Relationship Between Amount of Integration and the Sociometric Status of Retarded Children." *Report at AERA, March 1975.*

Grossman, Herbert J., ed. *Manual on Terminology and Classification in Mental Retardation.* Washington, D.C.: American Association on Mental Deficiency, Special Publication Series No. 2, 1973.

Hayball, H. and Dilling, H. "A Study of Students from Special Classes Who Have Been Returned to Regular Classes." Scarborough, New York: Board of Education, 1969.

Heber, R. "A Manual on Terminology and Classification in Mental Retardation," *Monograph Supplement of the American Journal of Mental Deficiency,* 2nd ed., 1961.

Iano, Richard P.; Ayers, D.; Heller, H. B.; McGettigan, J. N.; and Walker, V. S. "Sociometric Status of Retarded Children in an Integrated Program." *Exceptional Children,* 40, January 1974, pp. 267-271.

Jordan, Thomas E. *The Mentally Retarded,* 4th ed. Columbus, Ohio: The Charles E. Merrill Publishing Co., 1976.

Kirk, Samuel A. and Johnson, G. Orville. "Are Mentally Retarded Children Segregated in the Regular Grades?" *Exceptional Children,* 17, 1950, pp. 65-68.

Kirk, Samuel A. and Johnson, G. Orville. *Educating the Retarded Child.* Boston: Houghton Mifflin Co., 1951.

Kolstoe, Oliver P. "Programs for the Mildly Retarded: A Reply to Critics." *Exceptional Children,* September 1972.

Olympus Research Corporation. "An Assessment of Vocational Education Programs for the Handicapped Under Part B of the 1968 Amendments to the Vocational Education Act: Executive Summary," Circ., 1976.

Public Law 94-142. All Handicapped Childrens Act.

Shotel, J. R.; Iano, R. P.; and McGettigan, J. "Teacher Attitudes Associated with the Integration of Handicapped Children." *Exceptional Children,* May 1972, pp. 677-683.

Wilson, Richard J. "Characteristics of Former Special Class (EMR) Children Who Have Been Integrated into the Regular Class," Unpublished Doctoral Dissertation, University of Northern Colorado, Greeley, Colorado. 1973.

World Health Organization. "The Mentally Subnormal Child." *WHO Technical Report Series,* 1954, No. 75.

QUESTIONS AND ANSWERS

1. How do your recommendations for the mentally handicapped differ from:

   a. those in the open school concept
   b. what is good for all children?

a. If, by the open school concept, you mean an alternative education program, then my suggestions are quite compatible. Working for some criterion of mastery in a skill or set of skills is very difficult in a school that stresses subject matter mastery. Allowing students the option of working for competence in performance rather than fulfilling the requirements of Carnegie Units, would provide just such an option. Furthermore, the need for continuing education as a normal expectation of adult life is not compatible with a K-12 conceptualization of the ages for which schools are responsible. Opportunities for retraining should not be restricted by some arbitrary age parameters.

b. Generalizations are difficult to deal with when it comes to children, precisely because each child is different. Our major problem with programs for the handicapped in the past came about because we tried to generalize one kind of service delivery to all children. With the clarity of vision that comes from 20/20 hindsight, it is now obvious that what is really good for all children is not one kind of offerings, but rather many more options than we offered in the past.

2. Do you see vocational teachers acting in the same way as academic teachers in the classroom?

In my own experience, I have observed that vocational teachers show about the same degree of variability as any other group of teachers. They represent the range of behaviors from very inflexible to quite flexible, but they have some constraints other teachers do not have. One is the benefit of being able to observe rather than to infer the level of skill of their students. Standards of performance are therefore more objective than in many other classes. This sometimes is seen as restricting their tolerance for individual performance and has led to the charge of making everyone perform the same as everyone else. I think the charge may have a substantial element of truth to it, but I do not consider it an indictment of a program to give passing grades only to people of demonstrated performance competence. However, for those persons who have a handicap, it may mean that more time or more help must be made available before minimum skill mastery can be demonstrated. This certainly contributes to administrative problems, but it does not do a disservice to the students.

3. What kinds of influences on vocational teachers are needed to make them more capable of working with the handicapped?

Vocational teachers probably need more support than some other teachers who work with youngsters who have handicaps. These supports may take more forms than we realize. For example, just the verbal support of supervisors and administrators that lets teachers know they realize and appreciate the difficulty of working with the students with handicaps, may be the most

important of all the supports. More tangible help could be budgeted funds to allow the purchase of special materials needed to supplement the kinds of instructional materials used by youngsters who do not have academic deficiencies. Free time to visit youngsters with handicaps in job situations to learn of employer-employee problems may be another kind of support needed. There are many other kinds of supports that could be mentioned, but among the most important is that of not penalizing the teacher by evaluating the success of the handicapped youngster within the same time schedule and performance expectation as the nonhandicapped. Teachers should be rewarded for working with the youngsters who have handicaps, not penalized because the young person does not learn as efficiently or as well as nonhandicapped peers.

4. Is there anything being done to help the employer work with the handicapped?

Yes, there are many things being done, but they vary from place to place and program to program. Among the better attempts are those that involve setting up advisory committees with employers represented. Visits by the teachers to the employment sites and by employers to the training sites are more difficult to arrange but are also very effective. Probably the crucial factor involved in successful efforts is that a two or three-way communication system is in effect which involves the school, the community, and the family, including the youngster.

5. What can be done to influence government policies?

The National Advisory Council for Vocational Education has one position for a person who is concerned and knowledgeable about the handicapped. At a state level, the same provision is required by law. Simply being sure that these positions were filled by people of training and experience with the handicapped would be a significant step because state and local plans for including the handicapped in vocational education programs would be evaluated by people who are professionals in the field. Any inadequacies can be identified and brought to the attention of those persons who dispense funds. This is the most effective way to influence policies that I know of.

6. What kinds of jobs do you see appropriate for special needs populations—especially those with lower IQs?

One of the findings from follow-up studies has been that handicapped persons have consistently done better in job situations than we professionals have expected them to do. It has come as a very pleasant shock, but a shock nevertheless, that we consistently underestimate their vocational skills and abilities. However, a second finding that is equally crucial is that our efforts at predictive evaluation have been universally failures. When we put these two things together, it seems to indicate that the entry-level skill we can train for in our programs is pretty low, but that over a period of time, the handicapped will learn a very much higher level of skill, given the opportunity for growth on the job. In other words, our best training takes place after the person has gotten his or her first real job. To me this means that it doesn't make much difference what kind of entry-level job the person gets, but it is tremendously important that we provide opportunities for training as the person becomes more mature, confident, and experienced.

7. What do you see as the potential for IEPs to insure relevancy for handicapped students in vocational education?

Individualized Educational Programs (IEPs) were made a requirement of Public Law 94-142 precisely because many educational programs for the handicapped were seen as irrelevant and time wasting. I have great optimism that IEPs will go a long way toward assuring relevancy in our programs, but I am well aware that they create a burden for those persons who teach the handicapped if for no other reason than because they are time-consuming to prepare. The potential good far outweighs the burden placed on teachers in my judgment. I support them if for no other reason than the potential for good programs is so much better with IEPs than without them.